

# Capital Projects Governance Process Presentation to Oversight Committee

April 28, 2016

Presenters: Nasir Qureshi, Manager, Engineering  
Ray Cruickshank, Manager, Engineering



# Regular Council Meeting

## October 20, 2015

Moved by Councillor K. McGrath:

That the Chief Administrative Officer is requested to develop policies or guidelines for Council's review and approval concerning the circumstances under which business cases will be prepared and presented to Council, and the content of such business cases (including pro forma projections of operating costs and revenues extending a reasonable number of years into the future) in support of Administration recommendations for approval of large capital projects involving:

- (a) construction of buildings intended to provide recreation or leisure amenities; or
- (b) significant expropriations or purchases of private property; or
- (c) a public/private partnership business model.

CARRIED UNANIMOUSLY

# Oversight Committee Meeting

## November 26, 2015

Moved by Councillor S. Germain:

That the report on the Conklin Multiplex – Lessons Learned for Improved Governance Oversight of Capital Projects be accepted as information; and

That Administration prepare a report for Council's consideration which documents the lessons learned and contemplates implementing capital project controls, risk analysis, consent agendas and amendments to the Procedure Bylaw by January 31, 2016. \*

CARRIED UNANIMOUSLY

*\*Amendment to Oversight Committee motion on next slide*

# Oversight Committee Meeting

February 11, 2016

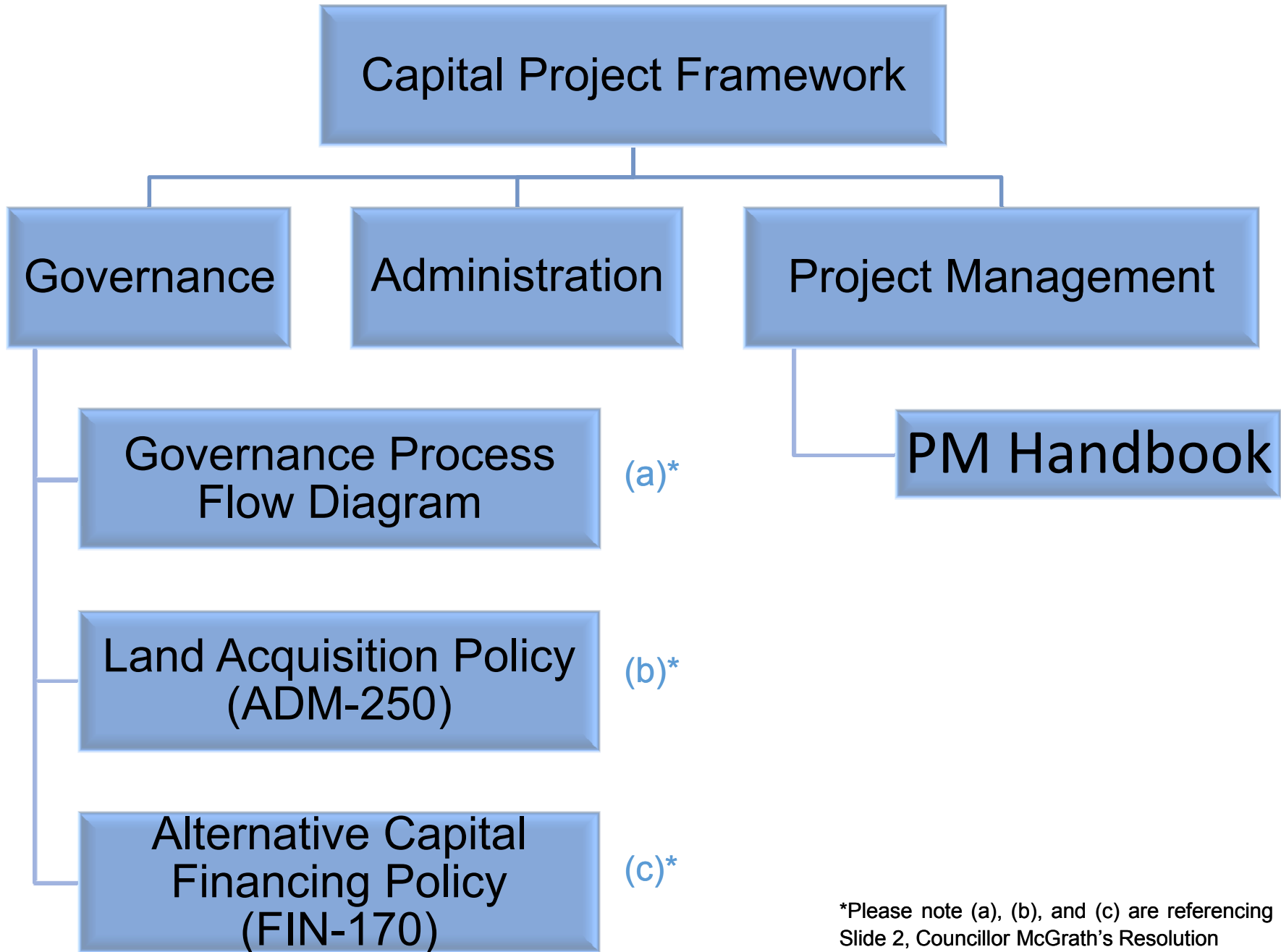
Moved by Councillor J. Stroud:

That the November 26, 2015 Oversight Committee resolution regarding Lessons Learned for Improved Governance Oversight of Capital Projects be amended by deleting the deadline of January 31, 2016 and replacing it with March 31, 2016.

**CARRIED UNANIMOUSLY**

# Objective

The objective of the presentation is to provide a proposed governance process for Capital projects incorporating the two noted motions.



\*Please note (a), (b), and (c) are referencing Slide 2, Councillor McGrath's Resolution

# Glossary

Process Type	Definition
<b>Type A Process</b>	<ul style="list-style-type: none"><li>• A more elaborate process than currently utilized</li><li>• Includes additional connections with Council at strategic points</li><li>• Connections to Council would be through a Council Committee where one exists</li></ul>
<b>Type B Process</b>	<ul style="list-style-type: none"><li>• Similar to process currently utilized</li><li>• Connection with Council is at budget requirements and at 95% design</li></ul>

# Glossary

Project Categorization	Definition
<b>New, Growth Related &amp; Service Level Expansion</b>	<ul style="list-style-type: none"><li>• Infrastructure not previously in place</li><li>• Includes replacing existing infrastructure with new</li><li>• Infrastructure required to meet existing or anticipated expansion in a community</li><li>• Infrastructure required to provide increased service delivery level</li></ul>
<b>Preservation &amp; Life Cycle</b>	<ul style="list-style-type: none"><li>• Restoration of existing infrastructure</li><li>• Major repair of infrastructure beyond normal maintenance</li><li>• Extending the useable life of existing infrastructure</li></ul>



# Glossary

Estimate Classification	Definition
<b>Class A Estimate</b> (+/-10% to +/-15%)	<ul style="list-style-type: none"><li>• Based on 95% design completion</li><li>• Final drawings and specifications</li><li>• Used to request construction budget</li></ul>
<b>Class B Estimate</b> (+/-15% to +/-25%)	<ul style="list-style-type: none"><li>• Based on 50% design completion</li><li>• Layouts with dimensions and alignments</li></ul>
<b>Class C Estimate</b> (+/-25% to +/-40%)	<ul style="list-style-type: none"><li>• Based on 30% design</li><li>• Estimate prepared with limited information (business case)</li><li>• Initial project costs identified and used for initial approval purposes</li></ul>
<b>Class D Estimate</b> (+/-50%)	<ul style="list-style-type: none"><li>• Based on high level requirements (feasibility study)</li><li>• Preliminary estimate which due to little or no site information indicates the approximate cost of the proposed project</li><li>• Used for planning and preliminary decisions (planning for funding)</li></ul>

# Capital Projects Matrix

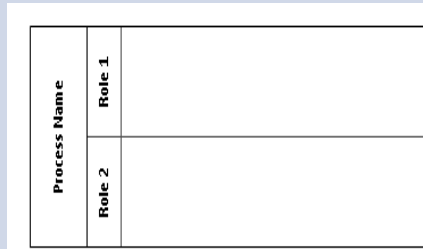
New, Growth & Service Level Expansion		
Group	Sub-Group	Process Type
Recreation	Facilities (e.g. Northside Recreation Centre, Conklin Multiplex)	Type A
	Trails/Parks (e.g. Active Transportation Trail, Ron Morgan Park)	Type A
Linear Infrastructure	Transportation Infrastructure (e.g. Roads, Bridges)	Type A
	Water & Wastewater (e.g. Storm Mains, Confederation Way Sanitary Sewer Bypass)	Type B
Non-Linear Infrastructure	Administration Facilities (e.g. SOC, Transit Facility, Fire Hall)	Type A
	Water & Wastewater (e.g. Lift Station, Lagoon, Water Treatment Plant)	Type B
Equipment	(e.g. Fleet, Ambulance)	Type B

# Capital Projects Matrix

Lifecycle		
Group	Sub-Group	Process Type
Recreation	Facilities	Type A
	Trails/Parks	Type A
Linear Infrastructure	Transportation Infrastructure	Type B
	Water & Wastewater	Type B
Non-Linear Infrastructure	Administration Facilities	Type B
	Water & Wastewater	Type B
Equipment	Replacement of Fleet, Ambulance	Type B

# Legend

## Business Process Mapping



Pool: The “Pool” encompasses an entire business process - read from left to right

Swim Lane: These are the horizontal rows or “lanes” in the pool. Show activities assigned to a single role (e.g. position or person)



**[Start]**

Start – Used to initiate the start of an activity



**Task/Function**

Task/Function – Activities that have to be performed



**Exclusive Gateway**

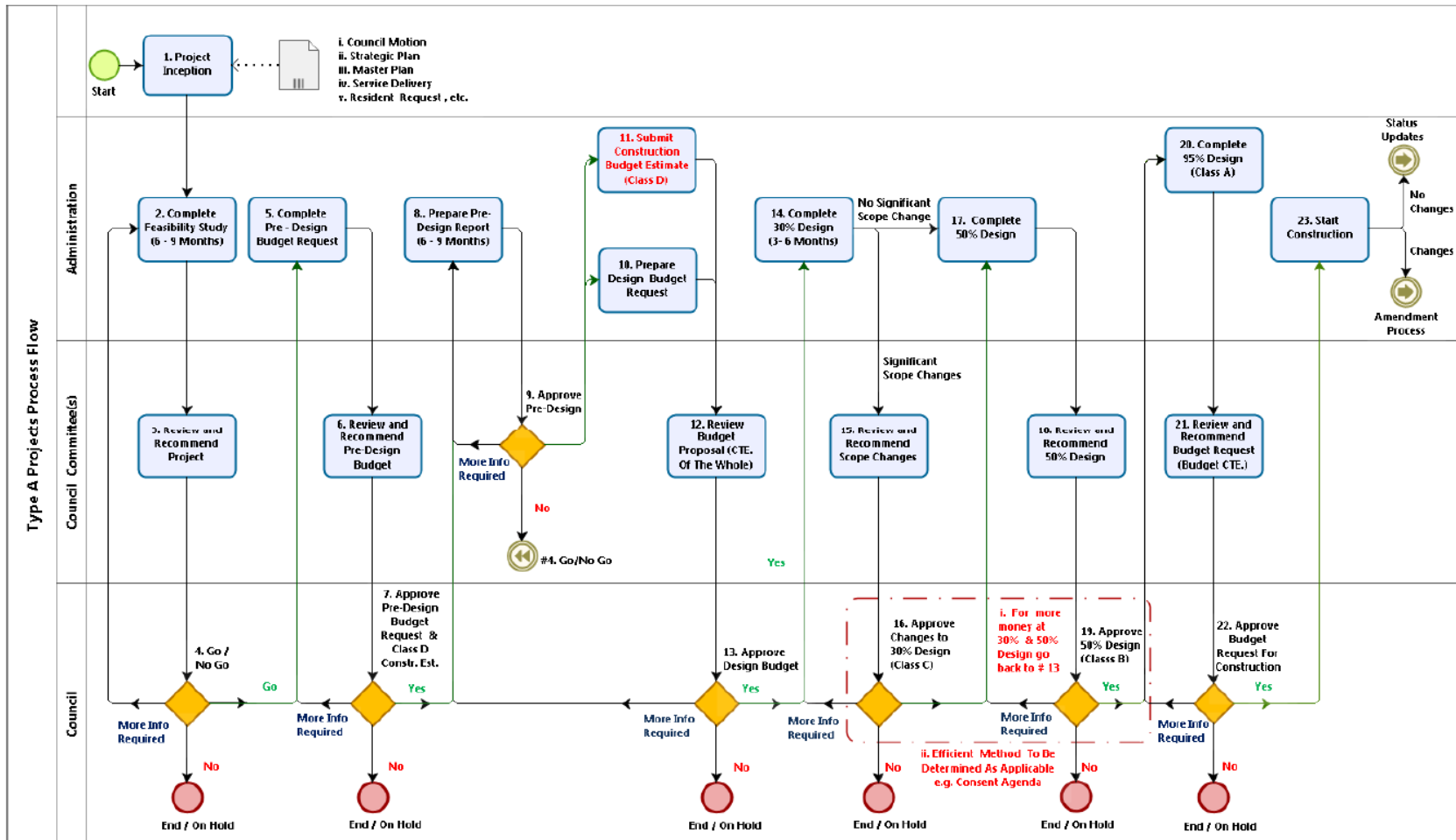
Exclusive Gateway - Decision point



**[End Event]**

End – Indicates the end of process/on hold

# Process – Type A Capital Projects



Note: i. At any point Council may decide to switch process type  
 ii. 30% and 50% Design approval will be determined by efficient method such as "Consent Agenda"

V10

# 1. Project Inception

- Council motion
- Strategic plan
- Master plan
- Service delivery
- Resident request, etc.

## 2. Complete Feasibility Study – Administration

Activities:

- Needs assessment
- Identify options
- Identify possible sites
- Class D cost estimate (+/-50% accuracy)
- Conceptual schedule

### **3. Review & Recommend Project – Applicable Council Committee/Council**

Input:

- Feasibility Study recommendation report
- Municipal Strategic Plan linkage

Output:

- Council Committee recommendation



## 4. Proceed/Don't Proceed Decision – Council

Input:

- Report to Council from the Council Committee

Output:

- Council decision

## **5. Complete Predesign Budget Request – Administration**

Activities:

- Capital budget request for predesign
- Project business case
- Project schedule

## **6. Review & Recommend Predesign Budget Request – Council Committee**

Input:

- Capital budget request and business case

Output:

- Council Committee recommendation

## **7. Approve Predesign Budget Request – Council**

Input:

- Council Committee's recommendation

Output:

- Council's decision

## 8. Prepare Predesign Report – Administration

Activities (where applicable):

- Stakeholder engagement sessions (Communications & Stakeholder Relations Department – Diagnostic Tool)
- Explore options and recommend preferred option
- Cost benefit analysis
- Detailed site analysis
- Site selection
- Geotechnical investigation and survey
- Project/program scope (inclusion/exclusion)
- Design data for detailed design
- Update business case
  - Total cost of ownership
- Class C design cost estimate (+/-25% to +/-40%)

## 9. Review and Approve Predesign Report – Council Committee

Input:

- Administration's recommendation on predesign
- Updated business case
  - Total cost of ownership

Output:

- Council Committee's recommendation

## 10. Prepare Design Budget Request – Administration

Activities:

- Capital budget request for design
- Updated business case
- Project schedule and scope

## 11. Submit Construction Budget Request – Administration

### Activities:

- Capital budget request for construction (+/-50%)
- Updated business case
- Project schedule and scope



## 12. Review Budget Proposal – Council Committee

### Input:

- Administration's recommendation design budget and construction budget (+/-50%)
- Updated business case
  - Total cost of ownership

### Output:

- Council Committee recommendation

## 13. Approve Design Budget Request – Council

Input:

- Council Committee's recommendation on budget requests

Output:

- Council's decision
- Design budget and construction financial plan approval

## 14. Complete 30% Design – Administration

### Activities:

- Land acquisition (if required)
- Permits and approvals
- Check the validity of the criteria set in project objectives
- Define walls and building systems (as applicable)
- Safety and environmental codes
- Updated schedule
- Class C construction cost estimate (+/-25% to +/-40%)
- Drawings of basic design
- Preliminary design description and layouts
- Alternates to project requirements
- Schematic evaluations

## 15. Review & Recommend Scope Changes – Council Committee

Input:

- 30% design
- Significant scope changes
- Updated business case
  - Total cost of ownership

Output:

- Council Committee's recommendation

## 16. Approval of 30% Design – Council

### Input:

- 30% design report
- Updated business case
  - Total cost of ownership

### Output:

- Provide feedback/comments or approval
- Red lining of design (no further changes to geometric design)

## 17. Complete 50% Design – Administration

### Activities:

- Input from 30% reviews
- Stakeholder engagement session
- Updated schedule
- Class B construction cost estimate (design stage estimate at 50% design completion) (+/-15% to +/-25% accuracy)
- Layouts with dimensions and alignments
- Typical material indication
- Elevations
- Typical details
- Equipment and furnishings

## **18. Review and Recommend 50% Design – Council Committee**

Input:

- 50% design report

Output:

- Recommendation to Council on 50% of the design

## 19. Approval of 50% Design – Council

Input:

- Project team's recommendation on 50% design

Output:

- Councils feedback, comments and approval



## 20. Complete 95% Design – Administration

### Activities:

- Input from 30-50% design reviews
- Complete design with details including;
  - Elevation and exterior details
  - Underground services drawings and specifications
  - Rough-in electrical and mechanical drawings
  - Finishing materials
- Final drawing and specification (draft)
- Updated design report and schedule
- Final business case
  - Total cost of ownership

## 21. Review and Recommend Construction Budget Request – Budget Committee

### Input:

- Administration's recommendation construction budget (Class A)
- Updated business case
  - Total cost of ownership

### Output:

- Budget Committee's recommendation

## 22. Approve Construction Budget Request – Council

Input:

- Construction budget request
- Final business case
  - Total cost of ownership

Output:

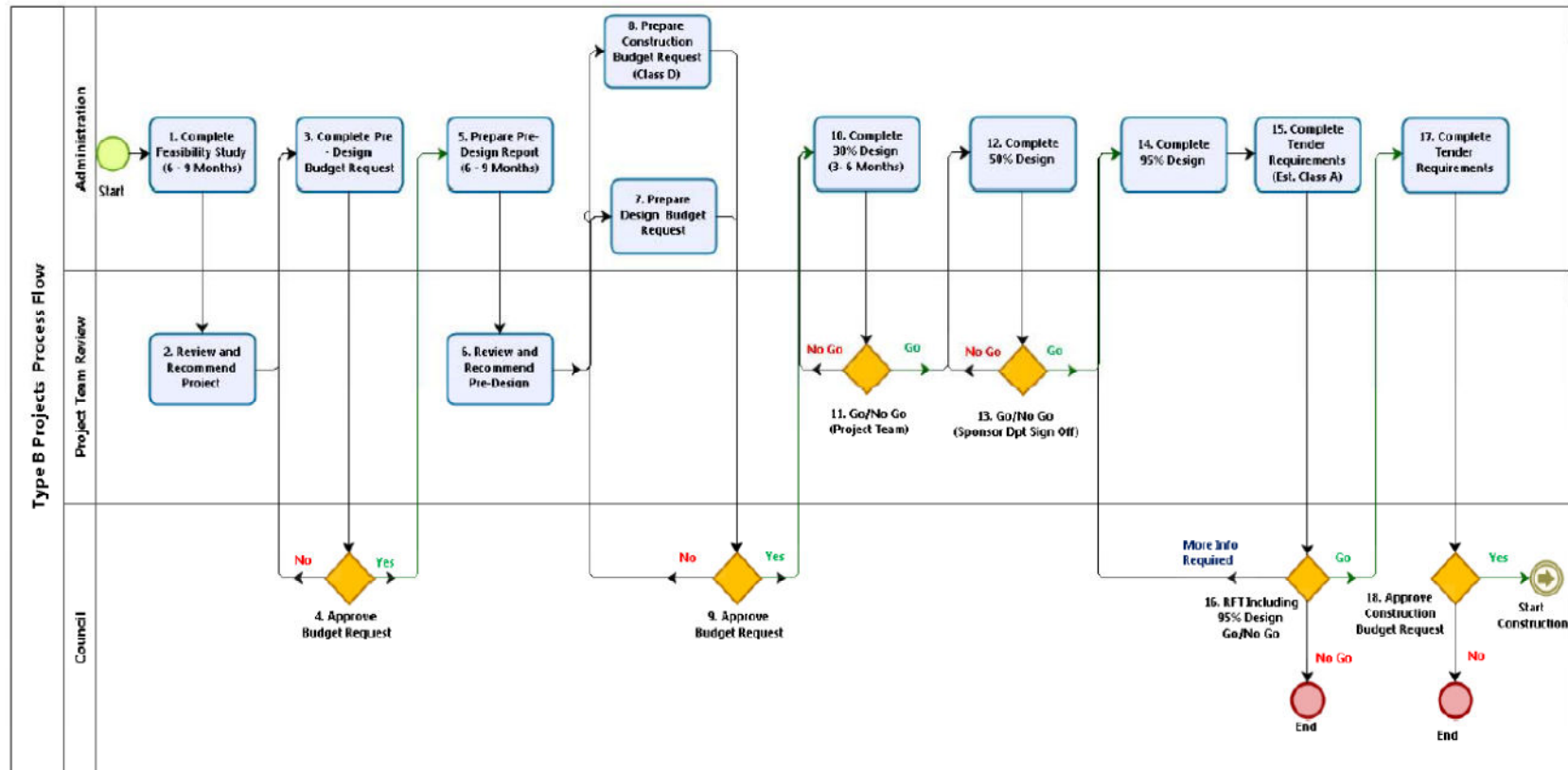
- Council Approval

## 23. Construction Starts

- Status updates
- Amendment

# Process – Type B Capital Projects

Draft Type B Project Process



Draft V5

**Thank You**  
Questions?